The
VETERINARY RECORD
Founded by William Hunting, F.R.C.V.S., in 1888
7, MANSFIELD STREET, PORTLAND PLACE, LONDON, W.1. MUSEUM 6541
No. 38 SEPTEMBER 22nd, 1956 Vol. 68
Registered for Transmission as a Newspaper *Price 2s. post free*

The President's Address to Congress

At the Annual General Meeting on Wednesday afternoon last, the President delivered the traditional address to the Association. Mr. Wilkinson said:—

" Since I was elected as your President, I have—as one would expect—been made even more aware of the activities of this Association. Not only does it continue to grow in the number of its members—now more than four and a quarter thousand, but it also grows in the many and diverse aspects of the work it performs for those members and, I venture to assert, not only for those members alone, but for the profession at large, both in these islands and across the seas. Its journal—THE VETERINARY RECORD—is still the only weekly veterinary journal in the world, and is quoted and used on occasions text-book fashion the world over. Although all of our members do not profess to admire their journal all the time, I am sure that some of us admire it most of the time! I can assure you that its Editor and those who advise him on the Editorial Committee are full of ideas for continued improvement. Nevertheless, this improvement is, to no small extent, in your own hands. THE RECORD cannot be expected to publish material with which it is not supplied! And while speaking of THE RECORD, many of us would like to see a regular feature devoted to news of the doings, socially and professionally, of our brothers and sisters in lands far from home. I know that THE RECORD is a much loved link between our scattered members, and that its arrival at far-off destinations is looked for with pleasure.

" The amount of work done by our headquarters' staff and by members of Council and committees has increased very considerably indeed in the past 10 or 12 years. It seems inevitable that it will continue to increase. During the year, a considerable number of most important matters have been under consideration and I must try to give you some account of some of them as they appear to me.

" After much discussion and after being twice referred back to your Officers, a new rule for admission to membership and, consequently, a new rule for erasure from membership, was agreed to by your Council. These will come up for confirmation or otherwise by this Annual General Meeting in a short time and I sincerely hope that you will give Council's recommendations your endorsement.

" One of the effects of the alterations to Articles 11 and 14 will be that it will be possible to admit to our membership not only those on the Registers of the R.C.V.S., but also those who hold other veterinary degrees, being degrees which are acceptable to your Council. Further, the new Articles will no longer link payment of an annual fee to the Royal College, with membership of the Association.

" The finances of the Association appear to be in a reasonably satisfactory condition. Nevertheless, it must be noted that our surplus of income over expenditure declined by nearly £2,000 for the year ended last December. On the other hand, after spending around £27,000 on the acquisition and adaptation of our Mansfield Street headquarters, it is worth repeating that we are no longer ' in the red ' at the bank. May I once more extend the thanks of this Association to the one person who is chiefly responsible for this happy state of affairs—Mr. Bywater, our Honorary Treasurer.

Meat Inspection

" Turning now to non-domestic matters, there seems to me to be several which are of outstanding importance.

" In the field of meat inspection, this Association has been unable to make any progress since Professor Robertson spoke to us last year at Belfast. As far as England and Wales are concerned, it is evident that most medical officers of health still appear to think that they have no need of the assistance of public health veterinarians. Yet, the public health veterinarian is considered essential in almost all other countries, the world over, where a serious attempt is made to safeguard the public health in the matter of all foods of animal origin. I was the subject of polite incredulity at a recent meeting in Paris attended by veterinary representatives of five continental countries when it was my unenviable task to explain that in England and Wales we of the veterinary profession were very little concerned with

the inspection of meat. The present situation of our profession with regard to these services in this country —apart from some few of the big cities—is that while lip-service is occasionally paid to the possibility of our specialised knowledge being utilised from time to time in an advisory capacity, no one in authority seems willing to take any steps to bring even this about, and the recommendation of the 1951 Inter-departmental Committee that veterinary surgeons should be appointed as senior inspectors responsible for groups of non-veterinary meat inspectors is completely ignored. This is all the more surprising in the light of the fact that a system similar to that recommended by the Association has operated successfully in Scotland for over 30 years. The present situation appears to me to be quite ridiculous. Anyone who frequents cattle markets must be aware that an appreciable percentage of meat is not inspected at all. I have heard it put as high as 30 per cent. It is true, of course, that public health meat inspection services are understaffed, yet the suggestion by this Association that veterinary surgeons in England and Wales could be employed full-time or part-time to help in this work has been ignored. Finally, it may be repeated that it has at no time been contemplated that participation of the veterinarian in meat inspection would be in any way detrimental to the interests of the public health officer now engaged in these duties.

The Arton Wilson Committee

"During the past year, the independent committee appointed by the Minister of Agriculture and under the chairmanship of Sir Arton Wilson presented its Report. As you know, it was required to review the provincial and local organisation and procedures of the Ministry of Agriculture, Fisheries and Food. Your Association's representatives have given written and oral evidence and we are naturally gratified with the recommendation that the technical work on the Milk and Dairies Regulations should be largely the concern of the veterinary staff of the Ministry's Animal Health Division. This was a policy which this Association expected would be implemented 10 years ago, following the 1944 White Paper on Milk. We urge the Minister to see on this occasion that this specific recommendation *is* implemented and that the failure to seize the opportunity given by the 1944 White Paper is not repeated after the Arton Wilson of 1956.

"The Association is disappointed that the Committee did not accept its recommendations with respect to the Poultry Stock Improvement Plan and the Sire Licensing functions and has since urged the Minister that both of these services should also be the concern of the Animal Health Division. It has always seemed to me that success or failure in the poultry industry is inextricably bound up with poultry disease, and the control of poultry disease is pre-eminently a veterinary matter. In the field of stallion licensing, I suggest that the present arrangements requiring a livestock officer to report on conformation and a veterinary officer to report on hereditary disease and conformation—as he has done for so many years in a perfectly satisfactory manner—is a particularly bad case of duplication and overlapping of services. However, the Association has sent its views on the Report to the Minister urging our points of view and we must await his decisions.

Artificial Insemination

"The artificial insemination services in this country are a most valuable asset to our livestock industry and because we believe that these services could be even more valuable, we have not left either the Milk Marketing Board or the Ministry of Agriculture in any doubt as to our views on the veterinary supervision of those services. We have been very concerned indeed about the number of centres in England and Wales which we felt could not possibly be receiving the necessary close personal veterinary supervision. You will notice that I have not included Scotland where all A.I. centres are under direct veterinary supervision. In the matter of A.I. arrangements as well as in meat inspection, Scotland is in advance of the rest of Great Britain; in Northern Ireland also, the whole of the direction of A.I. is in the hands of the State Veterinary Service. There are, I believe, in England and Wales, instances of A.I. centres which are 100 miles from the veterinary officer whose duty it is to give adequate veterinary supervision, and we have difficulty in believing that it can be completely effective under such circumstances.

"We, as an Association, very much regret the refusal of the Milk Marketing Board to extend the pilot scheme for closer liaison with centre veterinary surgeons and private practitioners; the more so because it is only a year since we were given to understand by the Milk Marketing Board representatives that this scheme was, in fact, proving useful. The reasons for the recent refusal of the Board to extend such co-operation are difficult for us to understand, and we do hope that it will be possible for second thoughts to modify this decision. On the question of recruitment of veterinary staff, we have no doubts as to the reason why the Milk Marketing Board has had difficulty in its efforts in this respect. Both salaries and conditions of service have been such as must fail in these competitive days to attract the right men in sufficient numbers.

"Let there be no doubt about it—transmissible disease is a most important factor in any insemination service and it is vital in such a densely cattle-populated country as ours that every precaution be taken to prevent such disease. It is the view of this Association that if the A.I. service is to obtain the maximum safety and efficiency, closer and more intensive veterinary supervision is required than is at present provided in many cases.

Registered Vaccinated Herd Schemes

"It is regretted that the Registered Vaccinated Herd Scheme has not been supported by the pig-breeding industry in the way that was hoped, and the answer to swine fever prevention on an adequate national scale has still to be found. A very great deal of work was carried out by this Association in collaboration with the N.F.U. and the Animal Health Division of the Ministry of Agriculture. Many difficulties had to be resolved, not the least of which

was the task of persuading some of our members of the desirability of each private practitioner financing to a major degree what was in fact a Government scheme. However, the real difficulty has been how to persuade the pig breeder of the wisdom of protecting his herd against its greatest scourge. One has heard it suggested that the best way to ensure the success of the Registered Vaccinated Herd Scheme would be for the Ministry to arrange for one or two outbreaks of swine fever in each county each month! It seems that an increase in the number of vaccinated pigs in the country must await an increase in the number of outbreaks of the disease. This state of affairs is to be deplored.

" To some extent, one sees a similar trend in the case of the Ministry's Calf Vaccination Scheme against bovine contagious abortion. And yet, I would suggest that vaccination with strain 19 has probably been one of the greatest, if not the greatest, single contribution made by veterinary science to the dairy and beef industry of this country. For a very modest outlay, the stockowner can ensure a high degree of freedom from the curse of bovine brucellosis. Too many farmers are taking unnecessary risks in omitting routine vaccination and quite a few are paying the penalty. I should have thought it as unwise for a farmer who had been free from the disease for some years to discontinue protecting his cattle against it, as it would be for him to discontinue insuring his rick-yard against fire on the plea that he has not had a rick-yard fire in the past few years. I remember a few years ago being assured by one of our colleagues at Compton that there were three kinds of dairy herd in this country—those which had abortion, those which had had abortion, and those which were going to have abortion. I commend these thoughts to our farmer friends.

" And speaking of our farmer friends, I wonder whether it is always realised outside our own circles just how friendly are the relations between the ordinary farmer and the veterinary surgeon, whether the latter is a G.P. or a Ministry V.O.? I often think that a day's work of a veterinary surgeon in farming practice is almost a succession of social calls with congenial and interesting work thrown in. There is perhaps one snag in our relationship, inasmuch as it is not so easy to persuade a friend that it is high time his outstanding account was settled!!

The Animal Welfare Societies

" In our relations with the animal welfare societies, the past year has not been as happy as we would have wished. However, we continue to enjoy close co-operation with the R.S.P.C.A. and with the Blue Cross League and we are happy to give of our services at clinics sponsored by those organisations. Nevertheless, we are gravely disturbed that far too many companion animals owned by poor people are not getting the best possible treatment; in fact, it is our belief that too often poor people's pets are getting poor treatment. We believe that co-operation between the veterinary profession and the P.D.S.A ought not to be difficult. We believe that our services should be available to the pets of poor people through the medium of the P.D.S.A. clinics and caravans as well as through those of other welfare societies. As you will know, however, there are certain main points to be cleared up and this Association believes it to be essential that these points are cleared up in order that a really useful and lasting co-operation can come about and continue between our members and the P.D.S.A. Members of the Association may rest assured that they will not be involved in any binding agreement until the negotiations on these outstanding points have reached a satisfactory conclusion.

" Our relations with the Press, more particularly those sections concerned with equine, canine, and agricultural matters are, I believe, on a better basis than they were previous to this past year. This Association does not expect the Press to print just that which it wants printed but I am sure that the gentlemen of the Press will always welcome the opportunity of getting to know us and to know our points of view and ideals. I believe that they will find it useful to be able to consult us from time to time on matters of national economic importance as well as on matters affecting every animal owner and animal lover, be he town or countryman. For this reason, your Officers have initiated social meetings between our two bodies which it is believed will be mutually useful. Having become better acquainted, it will be easier for us to appreciate and discuss one another's problems.

Representation on Official Bodies

" This Association has been concerned on several occasions during the past year that insufficient emphasis is placed by Government departments on the importance of veterinary representation on official bodies. No known opportunity is lost of urging this point of view on authority, but from time to time some advisory body is set up which, as we think, has inadequate veterinary representation. It should not be forgotten that the waste of public money and human effort which we saw in the Gambia poultry scheme was due almost entirely to the refusal of those who planned and carried out that scheme to act on veterinary advice and veterinary warnings.

" It is, therefore, satisfactory to be able to report that new ground has been broken during the past year in an attempt to increase our parliamentary contacts. A small social gathering at the Houses of Parliament—while on a very modest scale—was productive of valuable information and led directly to two of our members, Mr. Hebeler and Professor Robertson, being asked to address the Agriculture and Food Committee of one of the political parties. We feel that from these small beginnings we should progress to greater achievements in getting our profession's value more widely understood by our legislators. With these thoughts in mind, it is hoped that it will be possible for our spokesmen to repeat what has now been started.

" On the much broader aspect of public relations, your Council has approved a recommendation of a sub-committee of Past-Presidents and Officers that steps be taken to appoint a veterinary surgeon as a full-time Public Relations Officer with an eye to his possible advancement in the affairs of the Association within the next few years.

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Opening of the 74th Annual Congress, B.V.A., at Royal Leamington Spa

A large gathering of delegates, their ladies, and invited representatives of official, public, and scientific bodies was present on Monday morning in the Town Hall, Royal Leamington Spa, for the opening of the Association's 74th Annual Congress. The Deputy Mayor, Councillor Eric Lucas, welcomed the profession to the town, and the ceremony of official opening was performed by the Duke of Devonshire.

The Blessing was pronounced by Canon R. C. Streatfield, M.A., after which the President introduced the Deputy Mayor. In the course of his address of welcome he said:—

"I understand this is the first time for 50 years that you have held your Congress in the Midlands; and we are delighted and very proud that you have decided to have it in Leamington in 1956. Mr. Baxter, the Mayor, left for Germany on a good-will mission this morning and that has given me the opportunity of meeting you. He sends his compliments, and he hopes that on the serious side of your Conference you will gain an increase in the knowledge you already have, and that in your social functions you will find relaxation and enjoyment.

"Mr. President, you must be a very proud man to be the head of an Association whose object is the advancement and promotion of veterinary science, and you must have the gratitude of a public whose awareness of the need for personal attention and advice for their animals is growing rapidly. Your professional skill and love of your work have resulted in the accumulation of a mass of scientific knowledge of great benefit to the animal life of this world.

"Welcome to Leamington Spa. It is a pleasant enough place in the heart of England. I do hope you will enjoy your visit."

Having thanked Councillor Lucas, the President then invited the Duke of Devonshire to declare the Congress formally open. In so doing the Duke said:—

The Duke of Devonshire's Speech

"In being asked to open this Congress I am allowed to pay my humble but sincere tribute to the veterinary profession and I do so with the greatest possible pleasure. Among the literature sent to me is a copy of Mr. Hignett's paper which is to be read and discussed to-morrow. I have read it; I cannot pretend that I understood all of it, but it made clear to me the enormous progress, and the vast amount of assistance which has been given to British agriculture by the veterinary profession during the past years. There is no doubt that the healthy interest in British agriculture to-day is largely due to the work of British veterinary surgeons. We congratulate ourselves that farm livestock in this country is as healthy as in any country in the world; we are still one of the great stud farms of the world in spite of the fact that much of our bloodstock and pedigree cattle have been exported overseas; but these countries come back time and again to renew their stock. In all this great progress you, the veterinarians of Britain, have played a very important part.

"In paying this tribute I am borne out by two important committees of recent years. The Arton Wilson Committee, although rather critical of some sections of the Ministry of Agriculture, paid a striking tribute to the Ministry's Animal Health Division, that is, the Ministry's veterinary staff. The Gowers Committee on foot-and-mouth disease paid a warm and well-deserved tribute to the veterinarians of Britain.

"I am particularly pleased to pay my tribute because personally I do not think that nearly enough is known of the work done by your profession. Far be it from me to criticise your Association, Mr. President, but I think it may err on the side of being overmodest You play a very important part both in the nation's food production and in looking after the nation's health. In this connexion, I feel perhaps that it is not widely known how in America far more attention is paid to public health matters through the veterinary service. Not only is a great deal of attention paid to the subject of diseases communicable from animals to man, and vice versa, which is the subject of a paper to be read on Friday, but also, like most other countries in Western Europe, America is a long way ahead of this country in meat inspection and control. I know this is a topic which has been raised before but I hope you will think it permissible for me to raise it again on this occasion. Among western nations, generally speaking, Britain is the only one where meat inspection is not in the hands of those best qualified to do it—members of the veterinary profession. (Applause.) Having been through the office of mayor of a borough I know how careful and conscientious municipal officers are; they could not be more conscientious; but it is only common sense to realise that they cannot possibly have the knowledge or the essential background of fundamental science which veterinarians have, and which would help them to carry out their work. I feel that the Government of this country—perhaps this is the most suitable place to say so—would do well to accept that the veterinary profession is the most suitable body to carry out meat inspection and to see that this nation falls in line with other nations by passing the job over to the veterinary profession.

"Among other items of interest which I have learned about your Association is the enormous increase in the number of women in the profession. I think 25 years ago there were only two ladies in the profession and at that time ladies were advised in an official publication not to deal with calving cases or 'rough colts,' but that there were excellent opportunities for them in private practice on small animals. To-day there are no fewer than 378 women veterinary surgeons on the Register, a remarkable progress; and although it is true that the majority of them are in private practice, there are quite a number in whole-time appointments, including senior scientific posts, so their influence has spread right through the profession.

Veterinary Education

"An important aspect of the profession, in recent years, has been the development of veterinary education at the universities. This was laid down in

MR. E. R. CALLENDER, O.B.E., M.R.C.V.S.
President of the British Veterinary Association 1956-57

the Veterinary Surgeons Act, 1948; veterinary education has made great strides during the last 20 or 30 years. Just to give one example of figures: in 1920, at the Glasgow School, there were two whole-time and two part-time teachers and the inevitable man and a boy. Now there are 33 whole-time, four part-time teachers and 55 technicians—a remarkable increase in so short a time. What is true of Glasgow is equally true of other schools throughout the country. There has been a welcome addition of schools at Cambridge and Bristol, which are turning out first-class graduates, and which will continue to swell the numbers of graduate veterinarians throughout the country.

"There is a further aspect of the work done by your profession to which I will draw attention and pay my own tribute, and that is the work done by British veterinarians overseas, particularly in parts of our Colonial Empire and in the less productive and underdeveloped countries. There, if possible, the veterinarian plays an even more important part than he does here at home. In those countries where the population is increasing very rapidly the problem of providing enough food for them is very real indeed; it is one of the most vital and difficult problems with which the world is faced to-day. In the work which veterinarians do in controlling epidemic diseases among cattle and in providing better and more food, they are not only doing work of humanitarian value but work of great political importance. I think you in this country have every reason to be proud of your colleagues at work overseas, and particularly in the more backward countries. (Applause.)

"Finally, before declaring this Congress open, I would like to say one word about the veterinary profession in regard to one's own animals. I come into contact with the veterinary profession both from my interest in farming and from my own pets, and I can say with absolute pleasure—and it is a particular satisfaction to know that my own particular 'vet.' is here to-day—that I and countless millions look upon their 'vet.' not only as the guide, comforter and friend of their animals, but of themselves. They can turn to him when things go wrong with their animals; it is always a worrying time, but they know that their pets are in the best possible hands and that they care for them as if they were their own. We are very fortunate to have a body of men and women who take their work so conscientiously; they really care about the animals in their hands.

Abuse of Charitable Clinics

"I understand that there is a certain amount of abuse by people to-day of some of the charitable animal clinics which have been set up. These clinics are most admirable organisations but they are essentially designed to look after the pets of those who cannot afford a veterinarian. People who could afford to employ their own veterinarian, but who go to the clinics, are not only doing badly by a noble profession, but they are cheating the person responsible for the charitable organisation. Charity is not provided for those who do not need it. I would like to say also that all animal lovers in this country, and I think we are, by and large, a nation of animal lovers, do well to support veterinary surgeons; there is no finer professional body in this country."

CONGRESS CHURCH SERVICE

At the invitation of the vicar, Canon R. C. Streatfield, M.A., the Officers and a number of delegates to Congress attended Evensong at All Saints Parish Church, Leamington, on September 16th.

Canon Streatfield took as text for his sermon Proverbs XII. 10: "The righteous man regardeth the life of his beast," and having shown, by apposite quotation, that the Christian faith had, from the beginning, enjoined upon its followers the duty of kindness and justice to the animal kingdom, he elaborated upon the moral, social, and spiritual obligations involved. With these values the profession was intimately concerned, and the preacher knew that its members placed the humane, healing services rendered to the animals as sentient creatures, on an equal level, indeed upon an even higher level, with that which they rendered to the human community. He welcomed the presence of the profession that evening, and invoked the Divine blessing upon its work.

CONGRESS "AT HOME"

Members of the Midland Counties and the East Midlands Divisions were "At Home" to Congress delegates last Sunday evening. The two divisional Presidents, Mr. S. V. Collard and Mr. T. C. Denholm, with their wives, received the guests at the Regent Hotel. After the formal introductions an extremely enjoyable cocktail party took place, at which old friendships were renewed and new ones made. Among the guests were the President and Mrs. Wilkinson, the other Officers with their ladies, the President of the Royal College and Mrs. Pugh, the Principal of the Royal Veterinary College and Mrs. Glover, the Chief Veterinary Officer and Mrs. Ritchie, and many other senior members of the profession. Overseas delegates, of whom a detailed list appears on another page, were very welcome guests also. In brief, the two host Divisions are to be congratulated on getting Congress week off to a thoroughly good start.

THE COMMERCIAL EXHIBITION

The President formally opened the Commercial exhibition shortly after the official opening of Congress. He said the number of exhibitors—28—was equal to the largest number on record at any former Congress. He then read from a 1905 issue of THE VETERINARY RECORD the description of the commercial exhibition of that year, when Congress last met in the Midlands, at Buxton. Some of the apparatus, as Mr. Wilkinson commented, sounded quaint indeed in modern ears; but from that somewhat primitive beginning had evolved the fine exhibition of drugs, instruments, and other essential adjuncts to the profession's work as presented to the delegates on this occasion.

A description of the stands was published in last week's issue.

The Association's New President

Mr. E. R. Callender, O.B.E., M.R.C.V.S.

AT the Annual General Meeting held on Wednesday afternoon in the Town Hall, Royal Leamington Spa, Mr. E. R. Callender, O.B.E., M.R.C.V.S., was unanimously and with acclamation elected President of the British Veterinary Association for the year 1956-7. At the traditional ceremony he was invested with the Gown and Chain of Office by the outgoing President, Mr. Edward Wilkinson.

In electing a Superintending Veterinary Officer of the Animal Health Division to its highest office, the Association has turned to the Ministry for the second time in five years, and Mr. A. M. Graham's Presidency of 1952-3 is a happy augury for Mr. Callender's term.

Like many other veterinarians of note, Mr. Callender comes of farming stock, his father, Mr. Henry Callender, and earlier generations of his family, having held land at Bishopton in South Durham. The new President was born in 1897 and was educated at Stockton-on-Tees and at the Royal (Dick) School of Veterinary Studies, where he qualified in 1923. His education was interrupted during the First World War, when he served first in the Artists' Rifles, and later as a subaltern in the Durham Light Infantry; but once qualified, his progress in the profession was continuous.

For a year he was house surgeon at the "Dick," working under Professors Mitchell and Russell Greig, after which he entered private practice as assistant to Mr. A. H. Andrew at Ware in Hertfordshire. Public appointment soon claimed him, however, and he joined the staff of the Ministry in 1925. After four years he accepted an appointment with the Durham county authority, remaining with that body until the inauguration of the Animal Health Division in 1938.

Mr. Callender was first appointed Divisional Veterinary Officer for Durham County, and then, in 1940, Superintending Veterinary Officer for the area comprising the counties of Lancashire and Cheshire. During the serious foot-and-mouth disease epidemic of 1952, he was in charge of operations in connexion with the extensive series of outbreaks occurring in Cheshire. He was awarded the Order of the British Empire for public services in the New Year Honours of 1953.

Mr. Callender's is one of the best-known names in the profession generally, and in the Association in particular. He became a member of the Council more than 20 years ago, representing the North of England Veterinary Association, whose President he was in 1937. When he was transferred from Durham he joined the Lancashire Veterinary Association, being elected as its President in 1944. He still serves as a member of the Council of that body. For several years he was the very active chairman of the Veterinary State Medicine Committee of the B.V.A.

In addition to his professional duties, Mr. Callender has links with academic life in the University of Liverpool. Formerly a member of the Board of Veterinary Studies, he became, in 1952, a member of the veterinary Faculty and still remains so. For some years, also, he has acted as an examiner to the Royal Society of Health in connexion with the inspection of meat and other foods.

Throughout his life the new President has been an enthusiastic sportsman. He played both cricket and soccer for his school, soccer for the "Dick," and has been for many years vice-President of the Lytham cricket club. In view of the fact that Congress, during his year of office, will be held in Cambridge, it is interesting to note that his elder brother, Mr. R. H. Callender, who was killed in France in the First World War, was the well-known Cambridge blue, Corinthian, amateur international footballer and Durham county cricketer.

No account of Mr. Callender's contribution to the profession would be complete without mentioning that at the invitation of the late J. Holroyd, then chairman of the National Veterinary Benevolent and Mutual Defence Society, he became a member of that Society's Council and still serves in that capacity.

Not a few of the burdens of Presidential office fall upon the President's lady, and Mrs. Callender will share with her husband a busy and exacting year. They were married in 1926, Mrs. Callender being a daughter of the late T. F. Fawcett, J.P., of Stillington, Co. Durham. They have two sons, the younger of whom is a veterinary student at Liverpool.

The Association has chosen its new President wisely. He is a man of great professional knowledge, wide sympathy, and proven capacity. An accomplished man of affairs, shrewd, genial, and well informed, he is equally at home in the Council chamber or in the field. Where the profession's interests are concerned he is a firm and skilful negotiator, well versed in public life as in official tradition; and it may be forecast with confidence that under his leadership the Association will go forward in usefulness, in authority, and in prestige.

JUNIOR VICE-PRESIDENT OF THE B.V.A.

Mr. J. McConnachie Ingram, M.R.C.V.S.

It will give general satisfaction to members of the Association that Mr. J. McConnachie Ingram, who has served with notable ability for the past three years as Honorary Secretary, has been unanimously elected Junior Vice-President and President Elect.

Mr. Ingram is known as an outstandingly successful veterinary surgeon, fully abreast of the latest clinical practice and scientific information, and one who is completely typical of the modern generation of our profession.

He was born in Huntly, Aberdeenshire, educated at the Gordon Schools, the North of Scotland College of Agriculture, Aberdeen University, and Glasgow Veterinary College. He graduated in July 1928, and was assistant in practice with Professor D. Imrie (whose

pupil he had been) until 1931. From that year until 1936 he managed a practice in Hertford for Mr. A. H. Andrew when he moved to Oxted, eventually to take over his present practice in 1938.

Mr. Ingram is the past-President of the South Eastern Veterinary Association and of the Society of Practising Veterinary Surgeons, Fellow of the Central Veterinary Society, and a member of the Sussex Division. He has been a member of Council of the B.V.A. since 1947.

THE HONORARY SECRETARY OF THE B.V.A.
Mr. D. F. Oliver, B.Sc., M.R.C.V.S.

Mr. D. F. Oliver, who is well known to members of the Association, and particularly to those who reside in the south-east of England, has been unanimously elected Honorary Secretary.

As Hon. Secretary and Treasurer of the Lincolnshire and District Division for several years and as a Past-President of this society, Mr. Oliver has a long record of service to the veterinary profession. He became a member of Council B.V.A. just after the war, and has served on the Organising Committee since 1953.

After qualifying at Edinburgh in 1942, Mr. Oliver went as an assistant to Mr. J. R. Pratt of Northallerton, and later took over the practice of the late Mr. W. Gibson in Grantham. He is also a Lecturer in Veterinary Science at the Kesteven Farm Institute, and is a member of the panel of Dentition Inspectors to the National Pig Breeders' Association.

HOSTS TO CONGRESS

As mentioned in our last issue, two Divisions are jointly hosts to Congress this year. The East Midlands Division, formerly the Derbyshire Veterinary Association, held its inaugural meeting on October 8th, 1918. Mr. J. T. Abell, M.R.C.V.S., of Derby, was voted to the Chair, 17 members of the profession being present. Mr. Alex Levie, F.R.C.V.S., D.V.S.M., F.R.S.E., of Derby, was elected President, and F. T. Prince, M.R.C.V.S., Honorary Secretary and Treasurer. The annual subscription was fixed at 10s. 6d.

From the beginning the new Association expressed some decided views. In his address on January 14th, 1919, the President said: "Medical officers must be taught to mind their own business and to understand that veterinary surgeons with a long college training are quite capable of dealing with their own affairs without outside interference. Therefore, they must see that veterinary appointments under Corporations and County Councils were held by duly qualified veterinary surgeons who would not be required to play second fiddle to the medical officer of health, but who would have full control of their own department. This is the line of progress the D.V.A. intends to follow."

At a special meeting on February 21st, 1919, the main topic discussed was the presence of vendors of patent medicines and surgical appliances at agricultural shows. The meeting resolved to take a very firm stand about this and to approach the secretaries of the various agricultural shows in Derby making it clear to them that unless they were prepared to cease letting stands to "quacks," members of the veterinary profession would withdraw their professional services *en bloc*.

Another resolution passed was that the Society considered advisable the formation of a union to strengthen the position of practitioners by securing representation in Parliament, upon county councils, town councils, and other local administrative bodies. They decided also to ensure that they were suitably represented on the R.C.V.S.

During the early days we came across some names destined to become almost household words in the years to come—Messrs. Auchterlonie, O. V. Gunning, H. S. Cockburn, G. Eaton, H. L. Torrance, W. J. Ironside, and H. W. Steele-Bodger, just to mention a few. The name of E. Wilkinson, our President this year, appears as a regular attender and office bearer in the early thirties and a very common feature of the Divisional meetings was the care taken to provide demonstrations and clinical specimens on almost every occasion, and on this basis it may be considered that the current activities of the Division do not unfortunately stand comparison.

The first reference to the Division's long association with the Midland Agricultural College (now the Nottingham University School of Agriculture) appears in 1935, and the Division must consider itself very lucky to continue to have the facilities for meetings freely given by that institution.

Whilst the Division apparently extended the usual invitation to outside speakers it was particularly evident through the years that the Division's own members took a leading part in exchanging interesting information—for a time, "five-minute talks" by members seemed to be very popular and were in themselves an indication of the keen spirit which was —and still is—a feature of the Division.

On January 25th, 1949, it was proposed by Mr. Edward Wilkinson "that this Division be now known as the East Midlands Division" and it was carried without opposition.

This change of name was in itself a tribute to those who founded and guided "the old Derbyshire" and a recognition that their perseverance had rendered the field of interest to include Notts, Leicester, and parts of surrounding counties in a Division which has been referred to by visiting speakers time and again as a really active Division with remarkably good attendance whatever the subject.

The Division has built up something of a reputation as a supplier of office bearers to surrounding Divisions and it is a great pleasure and honour to the Division that one of its early members is currently President of the British Veterinary Association and senior vice-President of the Midland Counties Division.

The Derbyshire started with the specific intention of discussing the standardisation of fees. It is perhaps a measure of the profession's progress that the East Midlands at a recent meeting decided that a friendly discussion and interchange of information was preferable to any attempts at laying down the law in such matters!

Clinical Observations on the Bovine Omasum

BY

J. W. RAINEY

Westbury, Tasmania

UNTIL lately little was accurately known about the clinical vagaries of the bovine stomachs, apart from reticular perforation and the mechanism of bloat. Begg (1956) for example, tells us that it was not until 1949 that he and W. A. Whiteford " stumbled " on displacement of the abomasum which, we now recognise, can be a fairly common clinical entity under some conditions.

The object of the present article is to bring the clinical behaviour of the omasum into similar prominence so far as this can be done by a practitioner working alone.

The relative clinical neglect of the bovine omasum in British and Australian veterinary journals of late years is really remarkable in view of the lethal and painful part played by this organ in several bovine ailments.

Until the present writer started practice under a State veterinary scheme in Tasmania about 15 years ago he was hardly aware of the bovine omasum in any special way. Naturally, then, he was somewhat mystified by the frequent reference of the older farmers at that time to what they called " dry bible," meaning a primary dry impaction of the omasum. Wherever one went, " dry bible " was dreaded as a reputed cause of loss. One's scepticism about such a clinical entity was reinforced by the assurance of some Tasmanian colleagues that the whole thing was a myth due to past confusion with losses from botulism. But there is hardly any botulism in Northern Tasmania (where I was working at the time), and the uneasy feeling remained that there might, after all, be some truth behind an alleged myth so generally accepted by intelligent farmers. Consequently, it was decided to investigate the matter in the field.

A State veterinary clinical service enables the practitioner to make autopsies on the spot to an extent far greater, as a rule, than is economically possible in private practice, and full advantage was taken of this opportunity. As far as possible every bovine animal that died in the course of practice was opened and the omasum carefully observed. Observations thus made suggested that omasal atony of fatal outcome occurred in two different circumstances—either as an apparently primary condition, or as a condition developing secondarily in the course of certain other diseases.

Fatal Secondary Omasal Atony

In Tasmania, in animals dying from such various diseases as parturient haemoglobinuria, milk fever, or other post-parturient malady, one may, within 72 hours of the onset of the primary disease, find a secondary dry, distended, inflamed and necrotic impaction of the omasum, so well established that it appears to have been the immediate cause of death. Pain, exhaustion, toxaemia, and shock, no doubt also play a part. (The word "necrotic" as applied to the omasal changes in this article, refers to the obvious death of the membranous lining of the omasal leaves, and often of the entire leaf.)

In a sufficient series of autopsies, one can trace what appears to be a peritoneal infection, which may be due to the passage of pathogenic organisms through the greatly distended and already partly dead omasal wall, from the early stages, seen as a faint " blush " of the peritoneum in the close vicinity of the omasum, to more advanced stages where the dusky-red colour is seen throughout the abdominal cavity.

In every fatal case of impacted omasum there is also a black necrotic rumenal lining, such as one comes to expect in any fatal outcome of atony of the forestomachs.

In Northern Tasmania it is common in parturient haemoglobinuria, and not unknown in other post-parturient diseases such as milk fever, to have a cow die on the second or third day of the illness leaving no evidence to account for the sudden end, if we exclude a grossly distended and inflamed omasum. Apart from such a development we know that cows under treatment for such diseases do not die within two or three days as a rule. Consequently if the distended omasum is not the lethal factor, what is?

Tasmanian experience has shown, we think, exactly why, in parturient haemoglobinuria, prognosis is so closely linked with the appetite of the affected cow. Where anorexia is so complete that the cow will not try to masticate and swallow a slice of raw potato or ripe apple placed in the mouth, death is the rule, irrespective of treatment. On the contrary, if the succulent morsel is munched with some gusto, recovery may usually be expected. The difference depends on whether or not an acute gastric atony is added to the changes in the liver and blood.

If, and when, in a cow already critically ill, the omasum seizes up, the patient must die and no remedy we know of can save her. Things here often move much too quickly for us: in less than 48 hours from the first observed symptoms autopsy may reveal a fatally impacted omasum with a rapidly spreading peritonitis.

Primary Fatal Atony of the Omasum

Does such a clinical entity exist? Most Australian veterinarians who are at all interested in the matter seem disposed, if not to deny, at least to doubt its existence. The attitude is reasonable to the extent that lay talk in the past in Australia about " dry bible " has been absurdly overdone. As we all know,

a certain degree of omasal atony is common to many bovine diseases, so that a more or less dry and hard omasum is found after death from many causes.

The original enquiry by Arnold Theiler, of South Africa, into the nature of botulism in Australia provides classical evidence of how the layman could be misled by a dry omasum. Theiler tells us how he was puzzled by insistent claims from Australia that bovine animals dying from what was later shown to be botulism were really dying from what his informants called "dry bible." Subsequently Theiler discounted these claims and rightly decided that an impaction of the omasum had no pathological significance in botulism. Later in this article the present writer will refer to his own findings concerning the omasal involvement in bovine botulism.

In Russell Grieg's fourth English edition of Hutyra Marek and Manninger's "Special Pathology of Domestic Animals" a potentially fatal primary atony of the bovine fore-stomachs is taken for granted. Volume 2, pages 78 to 85, contains a full account with particular reference in small print to "a primary atony of the omasum (according to Detroye and Mezricky)." Presumably most of what Hutyra Marek and Manninger have to say about omasal atony is taken from Central and Eastern European experience. On the contrary, Udall, in the fifth edition of his "Practice of Veterinary Medicine," based on the work of his ambulatory clinic in New York State, makes no specific reference to a primary atony of the fore-stomachs. The striking difference in European and American accounts is probably due to differences in environment.

Environmental differences between Tasmania and the Australian mainland are also considerable, and there is reason to conclude that pathogenic influences affecting animals in Tasmania may in some instances resemble those found in parts of Central Europe more than the mainland of Australia.

Tasmanian Experience

Among us in Tasmania there are clinical workers of long standing who, from local experience of many more autopsies in the field than could have been made in past years before a clinical service existed, are satisfied that there does occur here at times a fatal dry, distended, and necrotic impaction, of the bovine omasum, in which no other apparent change could be the primary cause of death—primary, that is, in the sense that nothing anterior to the observed changes in the omasum and rumen can be identified by the naked eye. Other observed potentially fatal changes such as a peritonitis radiating from the omasum appear to be secondary.

However, the fatal impaction of the inflamed omasum can hardly be literally primary—some pathological change in the body not visible to the eye or clear to the mind of the observer must have preceded the omasal breakdown.

Prospects for Research

We clinicians do not know and, so far, no one can tell us, exactly why the omasum and rumen suddenly cease to function and become the site of changes which kill the animal. And it is going to be hard for research workers to inform us because there is no known way of producing the disease experimentally. In Begg's phrase, the clinician just "stumbles" on the condition at odd times, always in places remote from cities and usually when too late or inconvenient to get a trained pathologist to see the animal alive or at autopsy.

A Case History

Recently the writer had the good fortune to get timely co-operation from an expert pathologist in the second of two fulminating cases of so-called "dry bible" which sickened and died within 48 hours of attack. The outbreak occurred among a small mob of store steers running on sparse grass and clover pasture in early spring. The first case was found dead early in the morning by the owner. It had blundered—no doubt in convulsion—across a hedge in the night to drop dead in the next paddock. Autopsy showed nothing but a greatly distended, inflamed, dry, and early-necrotic omasum and black rumenal lining with an incipient peritonitis spreading from the omasum. The abomasum was normal. A second steer was standing almost immovably in the original paddock with its head turned tightly to the right side evidently in reaction to the pain of an inflamed omasum. Pulse as usual in these cases was rather slow and full, temperature 103, respirations slightly above normal.

A telephone request was sent to the pathologist of the Department of Agriculture to come to see the steer during life, and at an autopsy which would be arranged subsequently, as the case seemed hopeless and the owner was desperately anxious to know the exact cause. He could not manage to come that day but arrived next morning to make an autopsy on the sick steer, which had died, as expected, during the night.

The lesions were exactly the same as those of the first case and the pathologist (T. M. Alexander, M.R.C.V.S.), was unable to find any potentially fatal lesion primary to the impacted distended, inflamed and necrotic omasum. Other possible alternatives, such as lead poisoning and botulism, were considered and excluded for lack of evidence. The pathologist concluded that the first cause was nutritional but could go no further.

Differential Diagnosis

Mainland critics of a Tasmanian claim to the existence there of a fatal primary omasal atony have suggested that we may not have been careful enough to eliminate an atony secondary to such diseases as chronic lead poisoning, grass tetany, and even botulism. Such criticisms are sound and could be helpful, but the truth is that none of the alternatives suggested is within the bounds of possibility.

Chronic lead poisoning in rural Tasmania is almost non-existent and no malady of a chronic nature can be confused with a disease which in Tasmania almost always runs an acute and rapid course. The longest duration of a case of fatal impaction of the inflamed omasum observed by the present writer is six days.

Grass tetany, with which we are only too familiar, has a summer incidence and the symptoms have no resemblance to acute omasal atony, which is rarely found in summer. The typical clinical picture of an animal with acutely impacted and inflamed omasum standing rooted to the spot until it goes down in convulsions and dies is no part of the grass tetany syndrome. In some asthenic instances death occurs quietly from heart failure without prior convulsion.

Botulism, of course, has no resemblance at all to acute omasal atony. In botulism there is usually a history of fairly long recumbency during which the animal will still eat. The chest position is the rule. In " dry bible " the animal never eats and only lies down to die. Lateral recumbency is the rule: the chest position appears to be unbearable. At autopsy in botulism one often finds a fairly dry omasum, but the rumenal lining is unchanged and there is no inflammatory or necrotic change in the leaves of the omasum and never any peritonitis. At least this is so in cases observed by the writer in Tasmania.

On observation and reflection it is easy to see why the subject of acute impaction of the omasum cannot lie down for long and live. In a typical case the omasum is distended to a truly enormous size and is nearly as hard and heavy as a globe of wood. Such an abnormal viscus, tightly contained in the abdomen of a recumbent animal, pressing hard against and bruising the liver and other vital organs, must cause the utmost pain and distress apart from the peritonitis which follows so quickly.

Nothing of this sort happens in botulism, in which the animal lies in comparative comfort and often goes on eating till near the end. Last summer the writer observed an outbreak of botulism among cattle running in phosphorus—deficient bush country in phenomenally hot humid weather. The owner had systematically infected young rabbits with myxomatosis and turned them loose, and rabbits were dying on a large scale while the cows ate the stinking carcases. To test the mobility of the omasum in botulism, oats were fed to two recumbent cows that would still eat. The two animals were destroyed in extremis a few days later and whole oats were found in several places between the leaves of the omasum. Such a thing would be utterly impossible in " dry bible."

Connexion of Impacted Omasum with Abomasitis

Sometimes in a fatal omasal atony one finds also an inflammation of the lining membrane of the abomasum with nothing to show the relationship, or which came first, the abomasitis or the omasitis.

A Case History

Here, briefly, is the history of such a case, in which the writer was also fortunate in the co-operation of a trained pathologist (A. F. Ryan, B.V.SC.).

The subject—a cow about two months pregnant—had been pastured on green oats at the end of a dry spell and had been observed by the owner to be not feeding on the day before being seen by the writer. The animal was unwilling to move, pulse slow, temperature and respirations about normal. No rumenal movement. Complete anorexia. There was no significant change till the fourth day, when convulsions began while the animal was still standing. The pathologist and the writer observed one of these attacks together. During the paroxysms the force of the accelerated heart-beat literally shook the animal. These attacks did not last long but recurred at intervals, until at some time during the night they became unbearable and the cow broke through a strong fence to drop dead on the road outside. Autopsy showed an immensely distended, inflamed and impacted omasum, necrosis of the leaves, black rumenal lining, and an inflamed abomasum containing some grey sand, such as is often found in Tasmanian soils. Peritonitis in its early stages was seen radiating from the omasum and abomasum. And that was all, as it generally is in these cases.

Presumably the first cause was nutritional; but it must have been peculiar to this animal because no other cases occurred in a herd of about 30 cows similarly pastured.

This is by no means the first case of the kind in which one has found a six-weeks or two-months foetus. This may have no significance, or there may be some hormonal factor involved in the metabolic breakdown. This is of course pure conjecture, but what have we but conjecture to account for such sudden fatal atonies of the omasum together with equally sudden inflammation of the abomasum? It is perhaps a typical instance of the veterinary " no-man's land " pictured to us by E. L. Taylor as a reproach to the past, a condemnation of the present, and an incentive to future exploration.

Money and Malnutrition—a Key to the Riddle

In spite of high prices for primary products, inflated costs and social changes in Tasmania since the last war have precluded the general use in bovine husbandry of good protein food supplements such as the grains and cattle cakes which elsewhere and at other times were deemed essential to animal well-being in the colder months of the year.

This deprivation has compelled reliance during winter on withered herbage, indifferent grass-hay, and often, but not always, a succulent crop such as chou moellier or turnips, none of which is adequate in protein content for breeding or growing animals with a genetically magnified development.

The stress thus caused to a " hotted-up " metabolism must, either immediately or later, bear dangerously on the vulnerable fore-stomachs, which demand much energy for their active functioning.

This is not mere theory: it is a fact that in Tasmania we do get our fatal cases of gastric atony, both primary and secondary, mainly on farms where and when malnutrition is most in evidence.

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Actinobacillosis of the Tongue of a Dog

BY
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Introduction

WHILST infection of the tongue with *Actinobacillus lignieresi* is common in cattle, there appears to be no record of lesions in the tongue of the dog being associated with infection by a member of this group. The following case history was, therefore, thought to be of interest.

History

The subject was a nine-month-old Golden Retriever cross bitch kept on a farm. The lesions were seen by the owner some time before the condition was brought to our notice, but unfortunately the exact time could not be recalled although it was at least one month. Her report suggested that the lesion was first present on one side of the tongue only, and later spread to the other side. Since the animal appeared to be suffering no inconvenience, veterinary advice was not sought until August 18th, 1955. The animal was then still in good condition, and apparently suffering no ill effects.

Examination

The lesions noted by the owner were seen to consist of swelling on the lateral aspects of the junction of the middle and posterior thirds of the tongue (see Plate I). The affected areas were hard but non-painful to the touch, and consisted of several yellow abscess heads which were obvious through the unbroken mucous membrane. Neither the submaxillary nor the pharyngeal lymphatic glands were palpably enlarged.

On the following day a closer examination was carried out under thiopentone sodium* anaesthesia and a biopsy specimen and swabs were taken. The cut surface of the lesion showed a collection of small abscesses containing a yellow, rather oily pus, in a fibrous matrix.

Treatment

Pending the results of bacteriological examination, administration of penicillin was commenced; 300,000 units of crystalline penicillin being injected intramuscularly once daily for six successive days. At the end of this period the lesions had decreased in size and therapy was discontinued. Although at this stage the bacteriological report suggested that the causative organism might be somewhat resistant to penicillin the clinical improvement was so marked that it was felt unnecessary to treat further unless the condition showed signs of recrudescence.

Course

During succeeding weeks the lesions continued to regress and three months later they could be felt as small spherical nodules approximately 4 mm. in diameter. There was no longer any evidence of their presence on the surface of the tongue apart from a slight fibrous scar (see Plate II).

During the whole period the dog continued to thrive and at no time were any general ill-effects noted.

Bacteriological Examination

The swabs were plated onto ox-blood agar plates and inoculated into Hartley's broth in duplicate. One set of media was incubated anaerobically and the other in 10 per cent. carbon dioxide. Growth occurred in both series although this was more profuse under aerobic conditions with additional carbon dioxide, and consisted of small, shiny convex colonies together with a few alpha haemolytic streptococci.

Further examination of the predominant organism showed it to have the following characteristics:—

Morphology (24-hour aerobic culture on F/B)

In stained smears the organisms appeared to be small coccobacilli, arranged singly, in pairs, or small groups, demonstrating some pleomorphic coccus-like forms. It was gram-negative, non-acid-fast, non-motile, non-capsulated, and no endospores were formed.

Cultural characteristics

On *fresh-blood agar*, the colonies were of the order of 1 mm. in diameter after 24 hours' incubation, thereafter increasing in size with subsequent incubation. They were smooth, shiny, convex entire colonies, translucent and easily emulsified.

Growth was slow on nutrient agar and no growth was obtained on Bile Lactose agar.

Good growth was obtained in *broth* producing a heavy granular deposit with slight turbidity. A filiform growth occurred in gelatin with no liquefaction or surface growth.

Litmus milk, no change.

Metabolism and Growth Requirements

The strain was found to be aerobic with little or no improvement with an increased CO_2 tension. A very feeble growth occurred under anaerobic con-

* Pentothal.

ditions. It grew well at 37° C. and very slowly at 22° C.

On fresh rabbit-blood agar, partial haemolysis was observed but only after three days' incubation.

Biochemical Properties

Indole	negative
Methyl Red	negative
Voges Proskauer	negative
Growth in citrate	negative
H_2S production	negative
Nitrite production ...	trace after two days

Sugars.—Certain sugars were fermented with the production of acid only. These included: dextrose, sucrose, xylose, trehalose, galactose, and mannose.

Late or feeble fermentation was also demonstrated with maltose and lactose.

No fermentation was demonstrated with mannitol, salicin, dulcite, sorbitol, inositol, dextrin, adonitol, glycerol, raffinose, inulin, aesculin.

Antibiotic Sensitivity Tests

The following results were obtained by direct comparison with the standard Oxford Staphylococcus strain of Heatley:—

Penicillin	less sensitive
Streptomycin	equally sensitive
Chloramphenicol	more sensitive
Chlortetracycline	equally sensitive
Oxytetracycline	more sensitive

Pathogenicity Test

Intraperitoneal injection, of an emulsified suspension from a young slope culture, into a guinea-pig, killed the animal in 24 hours. At *post mortem* there was a profuse peritoneal exudate with slight enlargement of the testicles but no obvious pus formation. No other findings were apparent. The strain was recovered in pure culture from the abdominal cavity.

Pathological Examination

Examinations of sections made from the biopsy specimen showed the lesion to be a collection of abscesses of varying size in an adult fibrous tissue matrix. The abscesses contained a moderately eosinophilic and relatively homogeneous material in which lymphocytes, fibroblasts, and a few neutrophil polymorphs were present in varying numbers in different abscesses. Surrounding the cavity of the abscess were lymphocytes, macrophages, fibroblasts, and atypical giant cells. In gram-stained sections a few gram-negative small bacilli were seen at the junction between cells and pus, but identification was difficult in the homogeneous background which also stained red.

Discussion

Two points of particular interest arise from these findings. The first is the exact identity of the causative organism. Compared with the description of *Actinobacillus lignieresi* given by Bergey (1948), the strain isolated from this case demonstrated marked similarities and differed only in certain biochemical properties, in its ability to grow feebly under anaerobic conditions and in its greater pathogenicity for guinea-pigs. Allowing for these differences from the type species it would seem logical to place this strain in the *Actinobacillus* group.

The second point concerns the results of antibiotic sensitivity tests *in vitro* and of treatment with penicillin. It should be emphasised, however, that the organism was not completely resistant to penicillin being only less sensitive than the highly sensitive Oxford *Staph. H.* Treatment was also carried out for a rather longer period than is sometimes the case.

A further point of some interest in view of the type of organism found was its isolation from a farm dog in contact with cattle.

Summary

A case of infection of the tongue of a dog with an organism of the *Actinobacillus* group and its successful treatment with penicillin is reported.

Acknowledgments.—We gratefully acknowledge the assistance of Professor A. Messervy and Mr. J. Yeats in taking biopsy specimens, and Mr. R. S. Undrill who took the original kodachromes from which the black-and-white photographs have been reproduced.

Addendum

Since the above was submitted for publication Savage and Isa have recorded a case which they describe as Tracheal Actinomycosis in a dog.

It is interesting to note, however, that on histological examination (there being no record of culture) the organisms in the rosettes stained gram-negative and showed no mycelia.

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THE ANIMAL HEALTH TRUST EXECUTIVE COMMITTEE

The Animal Health Trust announces that the following gentlemen have accepted invitations from its President, the Duke of Norfolk, to become members of the Executive Committee:—

The Earl of Northesk, Vice-Chairman of the Kennel Club and of Cruft's Dog Show, Mr. Francis S. Gentle, C.B.E., Chairman and Managing Director of the Greyhound Racing Association, Ltd., Sir Thomas Peacock, C.B.E., Chairman of the Milk Marketing Board, and Mr. L. M. Du Pré, Vice-President of the National Farmers' Union.

Bovine Monozygous Twins

BY

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PRACTICAL evidence in support of the occurrence of identical cattle twins has come from two separate types of study. In the first, or embryological approach, in which the names of Lillie (1917) and Keller & Tandler (1916) figure prominently, the criterion of uniovular origin has been a single corpus luteum in the presence of two embryos or foetuses *in utero*. In this connexion Lillie (1923) reviewed his own data and that of Keller & Tandler (1917) which had been derived from their separate studies of the bovine free martin. In Lillie's total of 36 slaughterhouse uteri, pregnant with twin calves, to which both ovaries were still attached, 35 specimens showed two corpora lutea and the remaining one only one. Keller & Tandler examined 90 uteri with twins; 88 showed two C.Ls. and the other two each had three C.Ls. None showed only one C.L.

Working also in Chicago where the classical studies of Lillie had been made, Erdheim (1942), presented further data on cattle twins collected from the slaughterhouse. He also observed 36 twins, out of a total of 3,824 pregnant uteri, and, like Lillie, found only one of these to contain a single corpus luteum. In this specimen, although there was a foetus in each uterine horn, there was a single C.L. in the left ovary. If Erdheim's records are combined with those previously mentioned, the percentage of identical twins among all cattle twins is 1.2 (2 in 162).

In the second, or clinical, approach to the recognition of bovine uniovular twins, the diagnosis has been based on the degree of likeness shown by same-sexed twins when examined soon after birth. In this way data have been compiled by Johansson (1932) and Bonnier (1946) in Sweden, and by Hancock (1949) in New Zealand. In reviewing the records of these writers, Johansson & Venge (1951) estimated that for dairy cattle, approximately 10 per cent. of same-sexed twins were of monozygous origin. Since like-sexed and unlike-sexed twins should occur in nearly equal number, this estimate means that 5 per cent. of cattle twins are identical.

The observed discrepancy in the estimates for the incidence of identical cattle twins obtained by the two methods has caused some writers, *e.g.* Bonnier & Hansson (1948) to search for an explanation. On the one side it is quite possible that those who worked from the embryological aspect overlooked occasional twin-containing uteri, where both twins were in the same uterine horn and only one C.L. was present in the corresponding ovary. Such uteri could easily be taken for single pregnancies, especially where laymen collected the uteri in the abattoir. On the other hand, since the morphological criteria for establishing identity of calf twins are rather uncertain, it is possible that occasional fraternal twins have been mistaken for identical pairs.

It seems to me, however, that the discrepancy may be due largely to the difference in the numbers of specimens examined by the two methods. Thus whereas the literature contains records of the examination of a total of only 162 twin-containing uteri, in which only two cases of monozygous twinning were recorded, several thousand like-sexed cattle twins have been examined by the clinical method.

The purpose of the present report is to record another "embryological" case of bovine monozygous twins. It was observed among a total of 10 twin-containing uteri which were collected at random over the past seven years from local abattoirs. The details were as follows:—

The subject was a six-year-old Ayrshire cow, pregnant 61 days in the left cornu.

At the external uterine bifurcation the left horn measured 7 cm. and the right horn 2.5 cm. The left ovary contained a normal corpus luteum of pregnancy which measured 2.7 by 2.3 cm., as well as two corpora albicantes of previous pregnancies and a very small red remnant of a cyclical C.L. The right ovary showed two follicles, each of one centimetre diameter, and a very small luteal remnant. Hence there was only one functioning corpus luteum and no sign of a recently regressing C.L.

On opening the uterus, a single chorion was seen to occupy both uterine horns, but the major part of it lay in the left horn. There was no sign of a division or constriction along its length; it was 76 cm. long, and at its widest part, which lay in the left horn, it was 6 cm. wide. In this part were two separate amniotic vesicles, each of which measured 7.3 by 5.4 cm. Each contained a foetus of 6 cm. body length.

By injecting the extremities of the chorionic sac with two different dyes, it was found that each foetus had its own allantois and that these two organs over-

Isolated chorion containing two amniotic vesicles and foetuses. On either side are the sectioned ovaries, the left showing a corpus luteum.

lapped in the middle of the chorion. It was of interest to note that the main allantoic blood vessels had not anastomosed, although Lillie believed this to be possible in embryos of only 1.9 cm. body length. Both foetuses were male. The proximal foetus was in posterior presentation and the distal one anterior.

Acknowledgment.—I am grateful to my colleague, Mr. E. F. Lewis, M.R.C.V.S., for the photograph.

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The President's Address to Congress—*Concluded.*

Local Veterinary Inspectors' Fees

" During the past 8 or 10 years, this Association has spared no effort in pressing for improvement in status and salary of those veterinary officers employed whole-time by the Ministry of Agriculture. Those salaries have, of course, been put on a more realistic basis—one which can be expected to attract and retain good men and women for the State service. While not accepting that present salaries are adequate to those who have undergone five or six years' university training and at least one year's practical work thereafter, we must agree that the present situation is better than it was. But, Ladies and Gentlemen, those other veterinary employees of the State—the local veterinary inspectors, who are paid on a fee basis, have had no increase in their fees since 1947. It is therefore satisfactory to be able to tell you that your Council has authorised an approach to be made to the Ministry so that the whole question of L.V.I.s' fees may be brought under review. This is a decision which has been taken only after very thorough consultation with the Divisions of the Association and it is felt that we have a good case to put forward. Let me say, however, that your Council, in coming to its decision recognised the financial difficulties of our times and instructed your representatives not to lose sight of those difficulties in their talks with the Ministry.

" There are, of course, very many other matters which one would like to mention. For example, the very important contributions made by the Technical Development Committee and the work now starting on a Tropical Diseases Handbook by the Overseas Committee. However, time presses and much must go unsaid.

" Before I conclude these rambling remarks I must say how sincerely I thank you all, particularly our Headquarters' staff, Council, Past-Presidents, and my brother Officers for the help and encouragement given to me during the past year. To me it will always remain an unforgettable experience."

Current Literature

ABSTRACTS

A Preliminary Report on the Use of Meticorten in Bovine Ketosis. MORRIS, R., & HALL, C. (1956). *J. Amer. Vet. Med. Assoc.* **128.** 132-4.

Prednisone has been shown in man to have from three to five times the activity of cortisone or hydrocortisone. As meticorten (Schering) its use was studied in 40 dairy cows affected with ketosis. (The authors refreshingly state exactly what they understand by this condition.) Using the deep intramuscular route the dosage ranged from 100 to 400 mg., with 200 mg. most commonly employed.

Considering as the criteria of recovery the disappearance of urinary ketones, a marked rise in blood sugar levels to 50 to 80 mg. per 100 c.c., returning milk yield and appetite, together with that feeling of general well-being commonly reported in human subjects, detailed biochemical results are given of 28 of the cattle so treated. Of these, 24 responded to one dose only (supported in three cases by 500 c.c. intravenous 50 per cent. glucose), while four required a second dose to effect complete recovery.

While these results are in marked contrast with those obtained by earlier systems, the cost of prednisone treatment is, unfortunately, not stated.

Use of Hydrocortisone Intravenously in Animals Under Severe Stress. BOUCHER, W. B., HOLLISTER, C. J., & RAKER, C. W. (1956). *Vet. Med.* **51.** 53-5.

Hydrocortisone infusion concentrate in 50 per cent. alcohol was employed in a series of 10 surgical interventions in large animals, ranging from bovine caesarean section to laparotomy in the mare. A feature of these cases was that shock and sometimes toxaemic dehydration were present and that they were bad surgical risks.

The dose of hydrocortisone varied according to weight from 150 to 500 mg. administered by intravenous drip in 2,000 c.c. physiological saline with 5 per cent. dextrose, and repeated at discretion. (The bulk of fluid is worth noting.) It is recorded that although every case did not terminate favourably, the subject invariably responded to the infusion.

J. A. P.

OPENING OF NEW RESEARCH LABORATORY IN THE U.S.A.

Dr. Ian A. Galloway, Director of the Research Institute (Animal Virus Diseases), Pirbright, has left for the United States to attend the opening ceremony of Plum Island Disease laboratory of the Agricultural Research Service of the U.S.A. Department of Agriculture. He is contributing to the " Symposium on Vesicular Diseases," and has been invited to take part in consultations of a technical and specialised character in relation to research programmes on foot-and-mouth disease and other exotic diseases.

Dr. Galloway also proposes to visit a number of research centres engaged in research on viruses in different parts of the U.S.A. and Canada.

Victoria Veterinary Benevolent Fund

A MEETING of the Council of the Victoria Veterinary Benevolent Fund was held at No. 10, Red Lion Square, London, W.C.1, on Thursday, June 28th, 1956, when the following members were present:—

Mr. H. W. Dawes (President) in the Chair, Mr. E. Clark, Major J. J. Dunlop, Mrs. D. I. Glover, Professor J. McCunn, Mrs. F. N. Ritchie, Mr. J. N. Ritchie, Capt. W. Watt. In attendance, Mr. C. W. Francis, Secretary.

Minutes

The Minutes of the previous meeting held on April 13th, 1956, having been printed in *The Veterinary Record*, were taken as read and signed as correct.

Apologies for Absence

Apologies for absence were received from: Messrs. G. Atkinson, John A. Flynn, G. N. Gould, R. E. Glover, Professor R. Lovell, Capt. W. R. McKinna, Professor W. M. Mitchell, Mr. G. M. G. Oliver, Professors C. W. Ottaway, L. P. Pugh, Miss V. Tillemont-Thomason, Miss O. Uvarov, Capt. A. Whicher, Dr. W. R. Wooldridge, and Mr. L. E. Hughes, who was at present in hospital, having undergone a very serious operation.

On the proposition of the President, it was unanimously resolved that a letter be sent to Mr. L. E. Hughes expressing the Council's sincere wishes for a speedy recovery.

Correspondence

The Secretary reported that the following nominations to Council had been received:—

(a) Society of Practising Veterinary Surgeons, Mr. G. M. G. Oliver, M.R.C.V.S.

(b) Western Counties Veterinary Association, Mr. G. Atkinson, M.R.C.V.S.,

and that the South Eastern Veterinary Association had re-elected Dr. R. F. Montgomerie, Ph.D., F.R.C.V.S., as their representative.

Treasurer's Report

The Treasurer reported that since the previous meeting he had been able to invest the sum of £436 out of the Donations Account in the purchase of £547 1s. 11d. 3½ per cent. Funding Stock, 1990/2004. It was agreed that the action of the Treasurer be approved.

Accountant's Report

The following report was read and approved, a vote of thanks being accorded to the respective donors. Since the last meeting, the following special subscription and donations have been received:—

	£	s.	d.	£	s.	d.
Subscription						
Miss V. Tillemont-Thomason ...				5	5	0
Donations						
Cruft's Show (per Mr. S. F. J. Hodgman and others) ...	13	2	6			
East Midland Division (Raffle)	13	5	0			
Guildford Horse Show (per Mr. E. P. Barrett)	2	2	0			
Lancashire Veterinary Association	10	0	0			
Royal (Dick) School of Veterinary Studies—Students Annual Ball	8	8	0			
Scorgie, N. J., Professor ...	5	5	0			
Serth, G. W.	1	0	0			
				53	2	6
Collecting Boxes						
Central Veterinary Society (four meetings)	12	7	4			
Dumfries and Galloway Division	8	9	3			
East Midlands Division	1	3	0			
Essex Veterinary Society ...	7	3	0			
Scottish Branch, B.V.A. ...	2	8	10			
Welsh Branch, B.V.A.	1	11	10			
Western Counties Veterinary Association	7	19	3			
				41	2	6
				£99	10	0

Special Summer Gifts

The Secretary reported that the Executive Committee, with the kind assistance of Mrs. D. I. Glover, had agreed to the presentation of summer gifts amounting to £245 being sent to 33 recipients of the Fund. A list giving the names of the recipients and the amounts paid was submitted and approved.

Cases

No. 243. Widow. Three children, son 26 and two daughters 23 and 17. The President having personally investigated this case, he strongly recommended that the grant of £1 per week be continued to help the youngest daughter in her training to become a nurse. It was agreed that the grant be continued for a further twelve months.

No. 284. Member, aged 73. Application for a grant towards clothing etc. The Executive Committee reported that a special grant of £25 had been made in this case, which was approved.

No. 300. Widow, aged 90. The Secretary reported that in view of her advanced age and the fact that she was crippled with osteo-arthritis, the National Temperance Hospital had obtained a place for her in a Home where she could receive special care and attention. In the circumstances, the President decided that the grant of 10s. per week be discontinued.

It was resolved—

That the President's action be confirmed.

No. 301. M.R.C.V.S., aged 58. Seriously ill. Three children, 24, 21 and 18. A report having been submitted on this case it was decided that the Secretary be instructed to write to this member informing him that it is the Council's wish that future grants from the Fund should be devoted entirely towards the further training of his youngest daughter.

No. 307. M.R.C.V.S., aged 52. One son, aged nine years. The Secretary reported the receipt of a letter from this member asking the Council to cancel his grant as he was now sufficiently recovered in health to be able to resume veterinary work; he thanked the Council for the great kindness shown to himself and to his family. The Council accordingly terminated the grant as from June 30th.

No. 312. M.R.C.V.S., aged 67. An application for assistance having been submitted

It was resolved—

That a special grant of £50 be made to this applicant and that the case be further reviewed at the next meeting. In the meantime, the Secretary be requested to make further inquiries.

No. 314. Member, aged 84. In very poor health. The Executive Committee reported that they had made a grant of 10s. 6d. per week and allocated £10 out of the Special Gift Account in this case. The action of the Executive Committee was approved.

No. 315. Member, aged 86. Crippled with arthritis. The offer of the Hon. Secretary to make a personal call on this member and also to contact the local Medical Officer of Health was warmly agreed to. The Council also agreed that, if necessary, the Executive Committee should take any action in this case which they considered desirable.

Grants in Kind

The President stated that this item had been placed on the agenda on the instructions of the April meeting. To assist the Council in its deliberations, the Secretary and himself had in the meantime taken the opportunity of going through the list of persons receiving assistance through the Fund. The Secretary also informed the Council of the conversation he had had recently with the Family Welfare Association. The Council having considered the matter, Mr. J. N. Ritchie proposed, the President seconded, and it was unanimously resolved—

"That in certain cases, arrangements be made for local members of the profession to contact the recipients periodically so that when the need of a grant in kind arises, recommendations may be submitted to the Council for their consideration."

Date of Next Meeting

It was agreed that the date of the next meeting be left in the hands of the Officers of the Fund.

Vote of Thanks

On the proposition of Mr. J. N. Ritchie, seconded by Capt. W. Watt, a hearty vote of thanks was accorded to the President for his conduct in the Chair.

News and Comment

THE CIVIC RECEPTION

In the absence of the Mayor of Leamington on official business, the deputy mayor, Councillor Lucas, with Mrs. Lucas, received Congress delegates at the Town Hall on the occasion of the civic reception and dance. This first official social occasion was largely attended, and the gracious hospitality extended by the leaders of the borough was much appreciated.

OFFICIAL DELEGATES TO CONGRESS

The following official delegates were welcome guests of the Association at Royal Leamington Spa:—

Ministry of Agriculture, Fisheries and Food, Mr. J. N. Ritchie, C.B., M.R.C.V.S., D.V.S.M., Chief Veterinary Officer, and Mr. E. G. Morris, M.R.C.V.S., Superintending Veterinary Officer.

Dept. of Agriculture for Scotland and Dept. of Health for Scotland, Mr. D. S. Barbour, M.R.C.V.S., Deputy Chief Veterinary Officer.

Dept. of Agriculture, Dublin, Professor J. A. Nicholson, M.A., PH.D., M.V.SC., M.R.C.V.S., Principal, Veterinary College of Ireland, Mr. P. Harnett, M.R.C.V.S., Deputy Director, Veterinary Services, and Mr. J. F. Timoney, M.R.C.V.S., Director, Veterinary Research.

Ministry of Health, Dr. J. Cauchi and Mr. T. A. Hole.

Isle of Man Board of Agriculture and Fisheries, Mr. D. W. Kerruish, M.R.C.V.S., Government Veterinary Officer.

Army Veterinary and Remount Services, R.A.V.C., Brigadier A. G. Ralston, Director, Lt.-Col. E. H. Lewis-Bowen, and Major J. H. Wilkins.

Ministry of Agriculture, Northern Ireland, Dr. D. Luke, B.SC., M.R.C.V.S., and Mr. J. S. Ogg, F.R.C.V.S.

American Veterinary Medical Association, Lt.-Col. N. A. Lasher, U.S.A.F. (V.C.), and Dr. R. C. Klussendorf.

Commonwealth of Australia: Australian Veterinary Association, Mr. L. N. Thornton.

Government of New Zealand, Mr. C. V. Dayus, M.R.C.V.S., Agricultural Liaison Officer.

South Africa Veterinary Medical Association, Dr. B. C. Jansen, Division of Veterinary Services, Onderstepoort.

Union of Veterinary Associations of Yugoslavia, Dr. Slavojub Milosavljevic, General Secretary.

International Veterinary Federation of Zootechnics, Professor Dr. A. De Vuyst (President).

Danish Veterinary Association, Dr. Knud Eriksen.

Uganda Veterinary Association, Mr. A. Taylor, M.R.C.V.S., Dept. of Veterinary Services, Gulu.

Ceylon Veterinary Association, Professor C. A. McGaughey, M.A., M.SC., M.R.C.V.S., D.V.S.M.

City of Birmingham, Mr. C. G. Allen, M.R.C.V.S., D.V.S.M., Chief Veterinary Officer.

City of Cardiff, Mr. J. H. M. Hughes, M.R.C.V.S., D.V.S.M., Veterinary Officer, and Councillor W. Groves.

Corporation of Glasgow, Mr. S. G. Abbott, M.B.E., M.R.C.V.S., D.V.S.M., Chief Veterinary Inspector, and Councillor G. Robertson.

Corporation of London, Mr. E. F. McCleery, M.R.C.V.S., D.V.S.M., Chief Veterinary Officer.

City of Manchester, Councillor A. Donovan, J.P., Councillor F. Siddall, M.B.E., and Mr. D. E. Orr, M.R.C.V.S., Chief Veterinary Officer.

City of Peterborough, Capt. W. K. Townson, M.R.C.V.S., Veterinary Inspector.

Borough of Preston, Mr. F. J. Proctor, B.SC., M.R.C.V.S., D.V.S.M., Veterinary Officer.

University of Liverpool, Professor D. L. Hughes, F.R.C.V.S., DIP. BACT.

University of London, Mr. R. E. Glover, B.SC., M.A., F R.C.V.S.

University of Edinburgh, Professor G. F. Boddie, B.SC., M.R.C.V.S., F.R.S.E.

Milk Marketing Board, Mr. G. F. Smith, M.R.C.V.S., Chief Veterinary Officer.

Agricultural Research Council, Dr. R. Scarisbrick, M.R.C.V.S.

Association of Veterinary Students, Mr. W. Beswick.

Royal (Dick) School of Veterinary Studies, Mr. Barry F. Leek.

Cambridge University Veterinary Society (Students), Mr. J. Parry, B.A.

Glasgow University Veterinary Students' Society, Mr. D. Robertshaw.

Liverpool University Veterinary Students' Society, Mr. C. L. Butler.

NEW VETERINARY RESEARCH CENTRE IN NEW YORK

Under a special bequest from the Caspary Estate a new veterinary research centre is to be set up in New York in conjunction with the Ellin Prince Speyer Hospital, which is affiliated to the University of Pennsylvania School of Veterinary Medicine.

The Speyer Hospital was established in 1914, and the new building is intended to house facilities for clinical, surgical, and laboratory research so that a balanced programme can be carried out in co-operation with the University. The emphasis will be on small animals and the zoonoses, and it is hoped that the new centre will offer graduate veterinarians an opportunity for further training as the programme is extended.

Dr. John D. Beck, formerly head of the Department of Medicine at the University of Pennsylvania, has been appointed Director of the Centre, and Dr. David L. Coffin has been appointed Director of Research, and an Associate Professor of Research Pathology.

PLATE 1A.—Tongue of dog showing swellings on both edges. August 19th, 1955.

PLATE 1B.—Left underside of tongue showing swelling. August 19th, 1955.

PLATE 2A.—Three months after treatment. The swellings have disappeared but a notch remains on the right edge of the tongue at the position from which a piece was removed for biopsy. November 20th, 1955.

PLATE 2B.—Underside of tongue showing notch and slight scar in the position from which the biopsy specimen was removed. November 20th, 1955.

FOOT-AND-MOUTH DISEASE

As from September 17th the Foot-and-Mouth Disease Infected Area around Oldland Common, Bristol, Gloucestershire, will be contracted as follows:—

The City and County Borough of Bristol.

IN THE COUNTY OF GLOUCESTER

The Petty Sessional Division of Lawford's Gate.

In the Petty Sessional Division of Thornbury: The parishes of Alveston, Rangeworthy, Almondsbury, and Patchway.

In the Petty Sessional Division of Sodbury: The parishes of Iron Acton, Yate, Horton, Little Sodbury, Sodbury, Westerleigh, Dodington, Tormarton, Acton Turville, Pucklechurch, Dyrham and Hinton, Cold Ashton, and Marshfield.

IN THE COUNTY OF SOMERSET

In the Petty Sessional Division of Weston: The parishes of North Stoke, Kelston, Charlcombe, Swainswick, St. Catherine, and Batheaston.

IN THE COUNTY OF WILTS

In the Petty Sessional Division of Chippenham: The parishes of Nettleton, North Wraxall, and Colerne.

The area described below is declared to be an Infected Area for the purpose of preventing the spread of foot-and-mouth disease:—

IN THE COUNTY OF GLOUCESTER

In the Petty Sessional Division of Tetbury: The parishes of Ashley, Long Newnton, Tetbury and Shipton Moyne, so much of the parish of Tetbury Upton as lies to the south of the main road (A.4135) running from Beverston to Tetbury including the said road and so much of the parish of Westonbirt with Lasborough as lies to the south and east of the main road (A.433) running from Didmarton to Tetbury including the said road.

IN THE COUNTY OF WILTS

The Boroughs of Chippenham and Malmesbury.

In the Petty Sessional Division of Chippenham: The parishes of Grittleton, Stanton St. Quintin, Sutton Benger, Christian Malford, Castle Combe, Yatton Keynell, Kington St. Michael, Kington Langley, Langley Burrell Without, Chippenham Without, Biddestone, Corsham, Lacock, and Pewsham.

In the Petty Sessional Division of Malmesbury: The parishes of Sopworth, Sherston, Easton Grey, Brokenborough, Crudwell, Hankerton, Charlton, Lea and Cleverton, St. Paul Malmesbury Without, Little Somerford, Great Somerford, Norton, Hullavington and Luckington and so much of the parishes of Dauntsey and Brinkworth as lies to the north and west of the road running from Sutton Benger via Dauntsey Green, Brinkworth, and Ballard's Ash to Wootton Bassett excluding the said road.

THE WILDFOWL TRUST

The Wildfowl Trust, of which Mr. Peter Scott is director, has had a most successful summer, in which about 450 young birds, some belonging to very rare species, have been hatched and (up to date) reared. The swans, geese, and ducks, gathered from many parts of the world, do not seem to have minded the rain, and there has been no heavy loss from disease. The trust is also planning an important extension of its work and is proposing to take a lease of Borough Fen decoy, which has been in operation for the catching of ducks since the 17th century.

A curious experiment, now being carried out, is to be recorded. In an attempt to stimulate breeding in certain birds, a hormone preparation, progesterone, is rubbed on to a bare patch of their skin. The number treated in this way is not yet large enough for definite conclusions to be drawn. Yet it is at least to be noted that several of the individual birds treated, none of which had bred before, did so this year.

RHINOCEROS BORN IN CAPTIVITY

The great Indian rhinoceros is one of the animals whose survival is most seriously menaced, and only a few hundred of the species are believed to be alive to-day. The main reason for its rapid extinction lies in the value attached to its horn in the Orient, and it has been the aim of many zoological gardens to breed these animals in captivity. The young pair at Whipsnade have so far failed to breed but a recent report from Zürich Zoo announces the birth of a rhinoceros to Toimothi and Gadadar, both of whom were brought from Assam and mated in 1952.

OXYGEN FOR A POLAR BEAR

On veterinary advice a young polar bear belonging to a Liverpool circus was given oxygen through a human respirator mask last week. The respirator was held over the bear's nose from outside the cage and a day and night rota maintained the supply. A series of injections was also prescribed and the bear appears to be "steadily improving."

NIGHT CALLS

A short time ago a letter appeared in *The Liverpool Echo*, complaining that veterinary help had not been available when a night call was made. Insufficient particulars were given to enable any opinion to be formed whether or not the correspondent's reproaches were justified; but the complaint drew replies, extracts from two of which are as follows:—

"It is now 10.30 p.m. and my husband, a veterinarian, has not yet returned from his rounds, which started at 9 a.m. Many people wait till they are home from work before telephoning, and consequently he has to be out most evenings on non-urgent calls. He has a day and a half off a fortnight and a week's holiday a year (if he is able).

"None of my family will be veterinarians. The pay works out at 5s. an hour (no extra for overtime) and this after a six years' university course."

* * *

"While understanding Mrs. Bartley's wrath, I would point out that there are some veterinarians who give a 24-hour service and will come out to see a sick animal at any hour.

"Unfortunately there are many people who abuse the services of the veterinarian, especially since the advent of the free clinic. My own experience has been that the poor animal has to be subjected first to the castor oil of the owner, secondly to the worm medicine of the pet shop, thirdly to the free clinic and finally (at any time after 6 p.m.) to the attention of the qualified veterinary surgeon."

PERSONAL

Birth

MARKHAM.—On September 4th, 1956, to Joyce, wife of A. E. G. Markham, B.SC., M.R.C.V.S., of P.O. Private Bag, Dar es Salaam, Tanganyika, a son, Gervase Graham.

Marriage

PARKER—WILSON.—On September 19th, 1956, at St. John's Presbyterian Church, Orpington, Kent, George Barlow Parker, M.R.C.V.S., to Diana Waite Wilson.

Deaths

BUXTON.—On Monday, September 17th, at Woking, Mrs. Buxton, widow of the late Professor Buxton. The funeral will take place at Streatley Church on September 24th at 2.30 p.m.

GORDON.—On September 16th, 1956, after a long illness courageously borne, Mary Leone, beloved wife of Dr. W. S. Gordon, C.B.E., of Compton House, Compton, Berks. The funeral will be held privately.

COMING EVENTS

September

27th (Thurs.). Meeting of the Lakeland Division, B.V.A., at the George Hotel, Penrith, 6 p.m.

October

4th (Thurs.). General Meeting of the Central Division, B.V.A., at the Royal Veterinary College, Camden Town, N.W.1, 6 p.m.

Autumn Meeting of the North of Scotland Division, B.V.A., in the Drumossie Hotel, Inverness, 2.30 p.m.

6th (Sat.). Joint Meeting of the Nutrition Society and The Laboratory Animals' Bureau at Guy's Hospital Medical School, St. Thomas Street, London, S.E.1, 10.40 a.m.

12th (Fri.). Meeting of the Welsh Branch, B.V.A., at the Belle Vue Hotel, Aberystwyth, 2.30 p.m.

16th (Tues.). Joint Meeting of the Essex Division, B.V.A., with the Essex Branch of the N.F.U. at the Essex Institute of Agriculture, Writtle, Nr. Chelmsford, Essex, 7.30 p.m.

18th (Thurs.). Ordinary General Meeting of the South Eastern Division, B.V.A., at the Royal Star Hotel, Maidstone, 2.30 p.m.

19th (Fri.). Annual Dinner-Dance of the South Wales Division, B.V.A., at the Seabank Hotel, Porthcawl.

24th (Wed.). Meeting of the R.A.V.C. Division, B.V.A., at the Zoological Society of London, Regent's Park, London, N.W.1, 12 noon.

26th (Fri.). Meeting of the Society for the Study of Animal Breeding at the Royal Veterinary College, Camden Town, N.W.1.

November

22nd and 23rd (Thurs. and Fri.). B.V.A. Conference on Supplements and Additives in Animal Feeding-stuffs at the Victoria Halls, Bloomsbury Square, London, W.C.1.

ADDRESSES OF DISEASE INFECTED PREMISES

The list given below indicates, first the county in which are situated the premises on which disease has been confirmed, followed by the postal address and date of outbreak.

Anthrax

Anglesey. Sein Fawr, Talwrn, Llangefni (Sept. 12).

Ches. Cooks Pit Farm, Faddiley, Nantwich (Sept. 8); The Orchards, Twemlow, Holmes Chapel; Hurst Green, Norbury, Whitchurch (Sept. 15).

Cornwall. Great Rosevidney, Ludgvan, Long Rock, Penzance (Sept. 7).

Cumberland. Brigham Farm, Keswick; Highgate Close, Troutbeck, Penrith (Sept. 10).

Denbigh. Brynffynnon, Pontfadog, Wrexham (Sept. 13).

Derby. Pale Row Farm, Shottle, Belper (Sept. 13).

Dunbarton. Napierston Farm, Jamestown (Sept. 8).

Hants. Hunton Manor Farm, Sutton Scotney, Winchester (Sept. 11).

Lancs. Dickinsons Farm, Pendleton, Clitheroe (Sept. 7); Barracks Farm, Hoghton, Preston (Sept. 13).

Somerset. Wembdon Farm, Wembdon, Bridgwater (Sept. 7); Archers Field, Quantock Road, Bridgwater (Sept. 11).

Staffs. Lower Newton Farm, Tean, Stoke-on-Trent (Sept. 7); Providence House Farm, Waterhouses, Stoke-on-Trent; Green Trees Farm, Rudyard, Leek (Sept. 10).

Sussex. Ware Head Farm, Halnaker, Chichester (Sept. 15).

Yorks. Lindrick Hill, Worksop (Sept. 8); Brook Farm, West Street, Wath-on-Dearne, Rotherham (Sept. 10).

Foot-and-Mouth Disease

Glouc. The Benthams, Tewkesbury (Sept. 12); Oakleigh Green Farm, Westerleigh, Bristol (Sept. 14).

Wilts. Home Farm, Patney, Devizes (Sept. 19); Herdswick Farm, Ogbourne St. George, Marlborough; Stoke Farm, Beechingstoke, Devizes; Hackpen Farm, Wroughton, Swindon; Lower Saltrop Dairy, Wroughton, Swindon (Sept. 12); Dodford Farm, Christian Malford, Chippenham; South Farm, All Cannings, Devizes (Sept. 14); Overtown Hackpen Farm, Wroughton, Swindon (Sept. 14); South Farm, Chisledon, Swindon (Sept. 15).

Fowl Pest

Lancs. Orchard House Farm, Blackgate Lane, Tarleton, Preston; Robin's Lane, Carleton, Blackpool (Sept. 10); Rose Dene, Moss Lane, Little Hoole, Preston; Breskens, Hall Lane, Longton, Preston (Sept. 12); 19, Robin Lane, Carleton, Blackpool (Sept. 13); Barbers Moor Farm, Croston; Chapel House Farm, Gill Lane, Longton; Highfields, Coe

Lane, Tarleton, Preston; Hall Lane, Longton (Sept. 14); Occupation Road Piggeries, Thornton, Blackpool; Robinlea, Robins Lane, Carleton (Sept. 15).

Norfolk. Papor Street, Yaxham, Dereham (Sept. 11).

Yorks. Plough Farm, Saxton, Tadcaster (Sept. 13).

Swine Fever

Bucks. 68, Ditton Road, Datchet, Slough (Sept. 12).

Dorset. 92, Darbys Lane, Oakdale, Poole (Sept. 13); Manor Farm, Holditch, Thorncombe, Beaminster (Sept. 14).

Essex. Bromley Lodge, Rettendon Common, Chelmsford (Sept. 11).

Lancs. Blackledge Farm, Tower Hill Road, Upholland, Wigan (Sept. 13).

Lincs. Kelsey Closes, Haxey, Doncaster (Sept. 11).

Norfolk. High Street, Docking, King's Lynn (Sept. 11); Westhall Farm, Shelfanger, Diss (Sept. 13).

Staffs. 152, Amblecote Road, Brierley Hill (Sept. 11).

Suffolk. Office Farm, Swefling, Saxmundham (Sept. 12).

Yorks. Pioneer Farm, Linthwaite, Huddersfield (Sept. 14).

CORRESPONDENCE

The views expressed in letters addressed to the Editor represent the personal opinions of the writer only and their publication does not imply endorsement by the B.V.A.

The Production of Antibodies by Very Young Calves

Sir,—Kerr (1956) has recently reported that only one of six seven-day-old calves inoculated with living and dead bacterial antigens produced agglutinating antibodies and then only to a low titre. Previously Kerr & Robertson (1954) found that calves under the age of 30 days did not produce a detectable immunological response following the inoculation of *Trichomonas foetus* antigen.

However, we have been successful in detecting an immune response to a live virus in very young calves. Neutralising antibodies were found in the sera of calves, the progeny of dams susceptible to rinderpest, 21 days after the inoculation of 80 cattle ID_{50} of lapinised rinderpest virus. Sera of the calves taken before inoculation were free of rinderpest neutralising antibodies.

In the neutralisation test used, five-fold dilutions of heat-inactivated sera, each containing 100 rabbit ID_{50} of lapinised rinderpest virus per ml., were incubated for one hour at 37° C. and inoculated into rabbits in 1 ml. doses, using five animals per dilution. The rabbits were killed five days after inoculation and examined for the presence or absence of lapinised rinderpest virus lesions. The 50 per cent. neutralising end-points of the sera were calculated using the method of Thompson (1947). Neutralisation titres (expressed as the reciprocal of the 50 per cent. neutralising dose) of the sera of calves three weeks after inoculation at 1, 4, 5, 29, and 63 days of age were $10^{1.4}$, $10^{2.6}$, $>10^{2.8}$, $10^{2.5}$ and $10^{2.8}$ respectively. The titres are similar to those obtained in adult cattle immune to rinderpest with the exception of the titre of the calf inoculated at one day of age. Whether or not this low titre is associated with an age factor is as yet unknown. Nevertheless, neutralising antibodies were detected in the sera of calves inoculated with antigen when less than one week old.

It appears likely that Kerr's view that " there is an unresponsive period in young calves immediately after birth " does not apply when viable lapinised rinderpest virus is the antigen and a neutralisation test is the technique used to measure the response. It may be that not only does the immune response of very young calves vary with different antigens as Kerr suggests, but also the type of test used to measure the response may qualify the result. We do realise, however, that since the calves were not bled until 21 days after inoculation, a very short unresponsive period would not have been recognised. If there is such a period, it must be less than 16 days as in adult cattle rinderpest neutralising antibodies are not detectable until five or six days after inoculation with lapinised rinderpest virus.

These results and further work will be published in due course. This note is published by permission of the Director, East African Veterinary Research Organisation.

Yours faithfully,

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September 5th, 1956.

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Salmonellosis

Sir,—I have followed with much interest the series of articles by Tuffery (*Vet. Rec.*, 1956, **68,** 396, 433, 478, 511, 568), and although he has pursued his researches through husbandry, infantile diarrhoea, ectromelia, Tyzzer's disease, and salmonellosis as infections and intercurrent infection in the laboratory mouse in Great Britain at relatively great length, I have found a great paucity of information relating to the nutrition of his laboratory animals.

I would venture to suggest that the disease problems encountered in the laboratory mouse are not greater, and are probably less, than those encountered in the breeding and rearing of turkeys. If my experience is any guide then I would categorically state that there will always be a very grave risk of aggravating latent infection to epidemic proportions until and unless the veterinarian pays more attention to diet than he does to the classification of diseases by pathological and bacteriological examinations, to remedial measures based on vaccine or drug therapy, and/or to remedial measures based on external hygiene via sterilisation and disinfectants.

I doubt if there is any animal more subject to *Salmonellae* infection than the turkey. Biester & Schwarte (second edition, 1948, 1,057) list about 50 antigenic types which plague the American turkey raiser, and since that date others have been identified. At the present time, in this country, one can encounter *S. typhi-murium*, *S. thompson*, *S. meleagridis*, *S. stanleyville*, and *S. barielly*—to name but a few, and in addition, I have isolated *S. gallinarum* and non-

motile types of the BO group. There is a good deal of evidence that *Salmonellae* are passed through the egg to the developing chick, also evidence that they contaminate the egg shell and remain viable on the shell for a long period. Hence, the hazard to breeders of turkeys, because of the conditions usually prevailing, with attendant filth, relatively crude control, and crude labour, must be immeasurably greater than in the case of mice maintained under laboratory conditions where hygiene may be practised and where labour should be somewhat more intelligent than that prevailing on farms.

My experience is that within four years, during which time the total production of poults from the four farms which I control has much exceeded the million mark, salmonellosis from being a scourge during the first year has now ceased to be an anxiety. In point of fact, we have produced nearly half a million poults this season, and as the farms are accredited, customers have the right to free *post-mortem* service under the Animal Health Scheme for accredited breeders. I have had no case reported to me by the authorities. I have not encountered a case of salmonellosis in poults hatched from our stock and retained on the farms with the exception of one culture of *S. barielly*, which literally had to be prised out of a mixed growth of organisms (coliforms) recovered from one poult which had died in a brood of 65. Subsequent enquiries showed that the last time *S. barielly* was encountered in this country was in 1948 and no significance was attached to its isolation at that time nor is any significance being attached to its recent isolation.

I have gone through the whole gamut: isolation of *Salmonellae*, typing, blood testing, incubator hygiene, disinfection, and drugs—in this last connexion spending £800 on one drug well boosted by the profession as being the answer to salmonellosis. Although having all the means and facilities for blood testing for the detection of carriers, for the past two years I have not thought such blood testing worth while and have preferred to rely on the nutritional aspect when dealing with flocks comprising 12,000 and 14,000 breeding hens and their progeny. I find I have little use for drugs or medicaments and in those cases where I have used them I can invariably detect a fault in husbandry which has interfered with the tenets of nutrition; for example, an excessive use of protein foods with the hope of stimulating growth, a failure to cut stemmy pasture with the result that impaction or semi-impaction aggravates coccidiosis or blackhead, not to epidemic proportions, but rather to an uneconomic degree of morbidity.

The original research upon which the nutrition is based was published as a series of papers some years ago (Barton Mann, 1945, *J. Agric. Sci.*, **35**, part 2, 95; part 4, 207; **36**, part 4, 289; **37**, part 2, 145). After the passage of years, I have no reason to alter my views, in fact, other workers have confirmed them in part (McGaughey, 1944, *Vet. Rec.*, **56**, 508; Black *et al.*, 1954. Sec. Papers, 10th World's Poult. Congress, Edinburgh, 121; Williams Smith, 1954. *Brit. J. Exp. Path.*, **35**, 447).

At the present time we are using 120 tons of food per week for the rearing of turkeys, which implies a not inconsiderable number of turkeys. We are virtually *Salmonella* free if one measures this freedom by the criteria of freedom from epidemics, or failure to isolate any *Salmonella* at routine *post-mortem* bacteriological examination, or by other laboratories from stock supplied to customers.

In the light of the foregoing it seems obvious to me that the purely veterinary approach to the problem of salmonellosis, as so ably set out by Tuffery, is doomed to failure unless nutritional factors are given pride of place. When this latter is done, as has been done in our case, then the matter ceases to be a problem.

I trust I may be forgiven for writing at such length. My excuse is, that it would appear to me that the profession is running around in circles on the outside of this particular problem leaving the nutritionist to cut the ground from beneath its feet. The profession cannot hope to command the respect it should until it embraces the view that epidemic salmonellosis is a matter of faulty nutrition rather than clutching at every straw thrown out by the chemical manufacturers and the animal feeding-stuffs trade.

Yours faithfully,

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August 25th, 1956.

DISEASES OF ANIMALS ACT, 1950—GREAT BRITAIN

Summary of Returns of Confirmed Outbreaks of Scheduled (Notifiable) Diseases

Period		Anthrax	Atrophic Rhinitis	Foot-and-Mouth	Fowl Pest	Sheep Scab	Swine Fever
16th to 31st August, 1956		11	—	31	29	—	28
Corresponding period in	1955	18	—	—	2	—	48
	1954	11	—	—	16	—	67
	1953	12	—	—	15	—	87
1st January to 31st August, 1956		1,085	8	80	457	—	529
Corresponding period in	1955	502	3	6	381	—	1,058
	1954	193	3	12	591	—	1,094
	1953	477	—	28	708	—	2,121